

**REMARKS**

This reply is submitted in response to the Office Action dated September 14, 2005. Claims 1 and 6 are amended, as noted above. The amendments above and the remarks that follow address the points raised in the Office Action and, thereby are believed to place this application in condition for allowance.

**Information Disclosure Statement**

A supplemental Information Disclosure Statement will be filed to address the Examiner's rejection of the Information Disclosure Statement filed on June 13, 2002. In particular, the supplemental IDS includes a copy of each non-patent publication.

Applicants note that previously cited German Patent No. 18741567 appears to have been erroneously cited in the previously-filed IDS (Applicants are not able to find a German patent with this number). Applicants cite German Patent No. 19841578 in its place in the attached supplemental IDS.

**Abstract**

The abstract is amended as requested by the Examiner in the Office Action to include only proper content.

**Claim Rejections under 35 U.S.C. §112**

Claims 1-8 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the enablement requirement. In particular, both claims 1 and 6 contain the phrase "determining the characteristics." The Office Action asserts that the specification does not disclose as to what the 'characteristics' refers. Claim 1-8 are also rejected under 35 U.S.C. §112, second paragraph, as being indefinite because of the Office Action deems the phrase "determining the characteristics" as indefinite.

In response, independent claims 1 and 6 are amended, as indicated above, to recite that the user waveform characteristics can comprise one or more waveform amplitudes. Support for this amendment can be found, e.g., on page 58, lines 34 – 37 of the specification, which states:

Amplitude ratios and amplitudes are determined via the DSP (e.g., element 900, or a DSP otherwise coupled with the processor board 118 and receiver 110), as well as certain waveform statistics. These values (e.g., matrices and vectors) are used by the MUD processor in various ways.

Applicants believe that the above amendments overcome the above 112 rejections of claims 1 and 6, as well as claims 2-5 and 7-8 that depend on these independent claims.

Further, Applicants note that no prior art was cited against the claims. Hence, in view of the above amendments and remarks, the application is believed to be in condition for allowance.

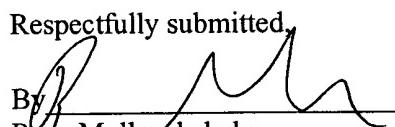
#### New Claim

New claim 9 depends on claim 1 and recites that the waveform characteristics can further comprise amplitude ratios of the user waveforms. Support for this claim can be found in the above passage on page 58 of the specification. Similar to claim 1, claim 9 is also believed to be in condition for allowance.

#### Conclusion

In view of the above amendments and remarks, Applicant respectfully submits that the claimed invention is in condition for allowance. Applicant therefore kindly requests reconsideration and allowance of the pending application.

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